

Type Species of Generic Names Applied to North American Lepturinae

(Coleoptera : Cerambycidae)

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In conjunction with work on the monograph of North American Cerambycidae (National Science Foundation Grant GB2326) much confusion, uncertainty, and error were encountered in determining the valid type species designations of the lepturine genera of North America. Since it is vital to have the proper designations in determining generic concepts, limits, and interpretations, the following is presented in an attempt to clarify the existing situation. No attempts at listing synonyms other than the obvious ones are made in this preliminary analysis of lepturine genera.

1. *Acmaeops* LeConte, 1850. Type species: *Leptura proteus* Kirby (Casey designation, 1913).
Listing by Plavilstshikov (1936) of *Leptura bivittata* Say invalid.
2. *Acmaeopsilla* Casey, 1913. Type species: *Acmaeops falsa* LeConte (monobasic).
3. *Alosterna* Mulsant, 1863. Type species: *Leptura tabacicolor* DeGeer (monobasic).
Allosterna is an improper emendation.
4. *Anastrangalia* Casey, 1924. Type species: *Leptura sanguinea* LeConte (by original designation).
5. *Anisorus* Mulsant, 1863. Type species: *Cerambyx quercus* Goetz (monobasic).
6. *Anoplodera* Mulsant, 1839. Type species: *Leptura sexguttata* Fabricius (Thomson designation, 1864, not Swaine and Hopping, 1928).
7. *Anthophylax* LeConte, 1850. Type species: *Anthophylax viridis* LeConte (Thomson designation, 1864).
Swaine and Hopping (1928) designation of *Leptura malachitica* Haldeman invalid.
8. *Argaleus* LeConte, 1850. Type species: *Argaleus nitens* LeConte (= *Pachyta liturata* Kirby) (Swaine and Hopping designation, 1928).
Synonymy of genotypes makes *Argaleus* a junior synonym of *Pachyta*.
9. *Bellamira* LeConte, 1873. Type species: *Leptura scalaris* Say (monobasic).
10. *Brachyleptura* Casey, 1913. Type species: *Leptura vagans* Olivier (by original designation).
11. *Brachysomida* Casey, 1913. Type species: *Acmaeops tumida* LeConte (by original designation).
12. *Carilia* Mulsant, 1863. Type species: *Leptura virginea* Linnaeus (monobasic).
13. *Centrodera* LeConte, 1850. Type species: *Rhagium decoloratum* Harris (Thomson designation, 1864).

This genus is not monobasic as stated by Swaine and Hopping (1928);

LeConte included two species, *R. decoloratum* Harris and *Toxotus pictus* Haldeman.

14. *Cercolia* Casey, 1913. Type species: *Leptura proxima* Say (by present designation).
15. *Charisalia* Casey, 1913. Type species: *Leptura americana* Haldeman (by original designation).
16. *Choriolaus* Bates, 1885. Type species: *Choriolaus latescens* Bates (by present designation).
17. *Cortodera* Mulsant, 1863. Type species: *Grammoptera spinosula* Mulsant (= *Leptura humeralis* Schaller) (Gressitt designation, 1951).
The designation by Plavilstshikov (1936) of *Leptura humeralis* Schaller is invalid, since this species was not included originally.
18. *Corymbia* Des Gozis, 1886. Type species: *Leptura rubra* Linnaeus (by original designation).
19. *Cosmosalia* Casey, 1913. Type species: *Leptura chrysocoma* Kirby (by original designation).
20. *Cyphonotida* Casey, 1913. Type species: *Ophistomis ventralis* Horn (by original designation).
21. *Desmocerus* Audinet-Serville, 1835. Type species: *Stenocorus cyaneus* Fabricius (= *Cerambyx palliatus* Forster) (monobasic).
22. *Dinoptera* Mulsant, 1863. Type species: *Leptura collaris* Linnaeus (monobasic).
23. *Dorcasina* Casey, 1913. Type species: *Leptura matthewsi* LeConte (by original designation).
24. *Encyclops* Newman, 1838. Type species: *Encyclops pallipes* Newman (= *Leptura caerulea* Say) (monobasic).
25. *Euryptera* Audinet-Serville, 1825. Type species: *Euryptera latipennis* Audinet-Serville (monobasic).
26. *Eutoxotus* Casey, 1913. Type species: *Toxotus schauimi* LeConte (by original designation).
27. *Evodinus* LeConte, 1850. Type species: *Leptura monticola* Randall (monobasic).
Plavilstshikov (1936) and Heyrovsky (1955) have both incorrectly listed *Pachyta liturata* Kirby as the type species of *Evodinus*. This species was not included by LeConte.
28. *Gaurotes* LeConte, 1850. Type species: *Leptura cyanipennis* Say (monobasic).
29. *Grammoptera* Audinet-Serville, 1835. Type species: *Leptura praeusta* Fabricius (Westwood designation, 1840).
Thomson's (1864) designation of *Leptura lurida* Fabricius is invalid, as is the selection of *Leptura ruficornis* Fabricius by Plavilstshikov (1936), Gressitt (1951), and Heyrovsky (1955).
30. *Hapolosalia* Casey, 1913. Type species: *Leptura vibex* Newman (by original designation).
31. *Idiopidonia* Swaine and Hopping, 1928. Type species: *Leptura pedalis* LeConte (monobasic and by original designation).
32. *Judolia* Mulsant, 1863. Type species: *Leptura 6-maculata* Linnaeus (Casey designation, 1913).
33. *Leptacmaeops* Casey, 1913. Type species: *Leptura longicornis* Kirby (by original designation).

34. *Leptalia* LeConte, 1873. Type species: *Anoplodera macilenta* Mannerheim (by original designation).
 35. *Leptorhabdium* Kraatz, 1879. Type species: *Xylosteus gracilis* Kraatz (monobasic).
 36. *Leptura* Linnaeus, 1758. Type species: *Leptura 4-fasciata* Linnaeus (Westwood designation, 1840).

The genotype designations by Latreille (1810) of *Rhagium mordax* Fabricius, and by Curtis (1831) of *Leptura elongata* DeGeer, are invalid because neither of these were included originally by Linnaeus. Thomson's (1860, 1864) designation of *Leptura virens* Linnaeus is also invalid because of the prior fixation by Westwood (1840). In 1886, Des Gozis improperly selected *Leptura melanura* Linnaeus as the type species and subsequently Plavilstshikov (1936) and Heyrovsky (1955) erroneously listed *Leptura rubra* Linnaeus as the genotype.

37. *Megaleptura* Casey, 1913. Type species: *Leptura emarginata* Fabricius (by present designation).
 38. *Microrhabdium* Kraatz, 1879. Type species: *Microrhabdium macilentum* Kraatz (monobasic).
 39. *Nakanea* Ohbayashi, 1963. Type species: *Leptura vicaria* Bates (by original designation).
 40. *Necydalis* Linnaeus, 1758. Type species: uncertain.

The question of type species of *Necydalis* and *Molorchus* has not been resolved.

41. *Neobellamira* Swaine and Hopping, 1928. Type species: *Strangalia delicata* LeConte (by original designation).
 42. *Neogaurotes* Podany, 1962. Type species: *Leptura virginea* Linnaeus (by original designation).

This name becomes a junior synonym of *Carilia* Mulsant by virtue of isogenotypy.

43. *Neoleptura* Thomson, 1860. Type species: *Neoleptura lecontei* Thomson (monobasic).
 44. *Nivellia* Mulsant, 1863. Type species: *Leptura sanguinosa* Gyllenhal (monobasic).
 45. *Ophistomis* Thomson, 1857. Type species: *Ophistomis flavocinctus* Thomson (monobasic).

Thomson included no valid species when this name was first proposed. Subsequently (1860), he assigned *O. flavocinctus* to the genus.

46. *Ortholeptura* Casey, 1913. Type species: *Ortholeptura oculatea* Casey (by original designation).
 47. *Oxymirus* Mulsant, 1863. Type species: *Cerambyx cursor* Linnaeus (monobasic).
 48. *Pachyta* Dejean, 1821. Type species: *Leptura 8-maculata* Fabricius (= *4-maculata* Linnaeus) (Westwood designation, 1840).

Thomson (1864) invalidly designated *Leptura 4-maculata* Linnaeus as the type species and Plavilstshikov (1936) and Heyrovsky (1955) incorrectly listed *Cerambyx lamed* Linnaeus.

49. *Paragaurotes* Plavilstshikov, 1921. Type species: *Gaurotes ussuriensis* Blessig (by original designation).

50. *Parallelina* Casey, 1913. Type species: *Leptura molybdica* LeConte (by original designation).
51. *Parapachyta* Casey, 1913. Type species: *Pachyta spurca* LeConte (by original designation).
52. *Pidonia* Mulsant, 1863. Type species: *Leptura lurida* Fabricius (Swaine and Hopping designation, 1928).
53. *Piodes* LeConte, 1850. Type species: *Piodes coriacea* LeConte (monobasic).
54. *Pseudogaurotina* Plavilstshikov, 1958. Type species: *Gaurotes splendens* Jakowleff (by original designation).
55. *Pseudopachyta* Swaine and Hopping, 1928. Type species: *Toxotus rugipennis* Newman (monobasic and by original designation).
56. *Pseudostrangalia* Swaine and Hopping, 1928. Type species: *Leptura cruentata* Haldeman (monobasic and by original designation).
57. *Pyrotrichus* LeConte, 1862. Type species: *Pyrotrichus vitticollis* LeConte (monobasic).
58. *Rhagium* Fabricius, 1775. Type species: *Cerambyx inquisitor* Linnaeus (Curtis designation, 1839).

The confusion existing in the usage of the names *Rhagium* and *Stenocorus* has resulted from the original proposal of *Stenocorus* by Geoffroy (1762) to include the group of species placed into *Rhagium* by Fabricius. With the subsequent invalidation of Geoffroy's work, *Rhagium* becomes distinct from *Stenocorus*.

Swaine and Hopping (1928) misinterpreted the situation and synonymized *Rhagium* with *Stenocorus* and designated *Cerambyx inquisitor* Linnaeus as the type species. Plavilstshikov (1936) and Heyrovsky (1955) incorrectly list *Rhagium bifasciatum* Fabricius as type species.

The genera *Hargium* Samuella, 1819 and *Allorhagium* Kolbe, 1884 are synonyms of *Rhagium* by reason of isogenotypy.

59. *Sachalinobia* Jacobson, 1899. Type species: *Sachalinobia retata* Jacobson (monobasic and by original designation).

S. retata is a junior synonym of *S. koltzei* Heyden.

60. *Stenocorus* Fabricius, 1775. Type species: *Leptura meridiana* Linnaeus (Plavilstshikov designation, 1936).

Since the work of Geoffroy (1762) has been placed on the Official Index of Rejected and Invalid Works by the International Commission on Zoological Nomenclature (Opinion 228, 1954), the generic name *Stenocorus* must be used in the sense of Fabricius (1775).

The designation of *Stenocorus parisinus* Fourcroy by Thomson (1864) as the type species of *Stenocorus* is invalid since that species was not in Fabricius' original list.

Swaine and Hopping (1928) designated *Cerambyx inquisitor* Linnaeus as the type of the genus which cannot be accepted since that species was included under *Rhagium* by Fabricius.

Plavilstshikov (1936) correctly designated *Leptura meridiana* Linnaeus as type species of *Stenocorus*.

In 1953 Gressitt presented some notes on nomenclature of Lepturinae in which he stated that the subgenus *Stenocorus* (*s. str.*) reverts to *Allorhagium*. This conclusion cannot be accepted since both the nominate subgenus and *Allorhagium* are isogenotypic.

The names *Toxotus* Dejean and *Minaderus* Mulsant become junior synonyms of *Stenocorus* by isogenotypy.

61. *Stenostrophia* Casey, 1913. Type species: *Leptura tribalteata* LeConte (by original designation).
 62. *Stenura* Dejean, 1837. Type species: *Leptura emarginata* Fabricius (by present designation).

This type designation makes *Megaleptura* Casey a synonym of *Stenura* by reason of isogenotypy.

63. *Stictoleptura* Casey, 1924. Type species: *Leptura cribripennis* LeConte (by original designation).
 64. *Strangalepta* Casey, 1913. Type species: *Leptura vittata* Olivier (by original designation).
 65. *Strangalia* Audinet-Serville, 1835. Type species: *Leptura luteicornis* Fabricius (Thomson designation, 1864).

Westwood (1840) designated *Leptura elongata* DeGeer as type species. This selection was invalid since that species was not in the original list, even though *elongata* DeGeer and *calcarata* Fabricius (name included by Serville) are junior synonyms of *maculata* Poda. Westwood did not synonymize *elongata* at the time of his type designation.

Des Gozis (1886) designated *Leptura attenuata* Linnaeus (not *rubra* as stated by Swaine and Hopping, 1928) as the type of *Strangalia*, but Thomson's prior designation takes precedence.

Aurivillius (1912) unnecessarily proposed the replacement name *Strangalina* for *Strangalia* and Swaine and Hopping designated *Leptura attenuata* Linnaeus as the type species.

66. *Strangalina* Aurivillius, 1912. Type species: *Leptura attenuata* Linnaeus (Swaine and Hopping designation, 1928).
 67. *Strophiona* Casey, 1913. Type species: *Leptura laeta* LeConte (by original designation).
 68. *Thesalia* Casey, 1891. Type species: *Acmaeops lisa* Leng (monobasic).
 69. *Tomentgaurotes* Podany, 1962. Type species: *Gaurotes batesi* Aurivillius (by original designation).
 70. *Toxotochorus* Reitter, 1907. Type species: *Toxotus tataricus* Gebler (monobasic).
 71. *Toxotopsis* Casey, 1913. Type species: *Leptura cinnamoptera* Randall (monobasic).
 72. *Toxotus* Dejean, 1821. Type species: *Leptura meridiana* Linnaeus (Westwood designation, 1840).

This genus is isogenotypic with *Stenocorus* Fabricius.

73. *Trachysida* Casey, 1913. Type species: *Leptura mutabilis* Newman (by original designation).
 74. *Trigonarthris* Haldeman, 1847. Type species: *Leptura proxima* Say (monobasic).
 75. *Typocerus* LeConte, 1850. Type species: *Leptura zebrata* Fabricius (Thomson designation, 1860).

The designation by Casey (1913) of *Leptura velutina* Olivier is invalid.

76. *Ulochaetes* LeConte, 1854. Type species: *Ulochaetes leoninus* LeConte (monobasic).
 77. *Vadonia* Mulsant, 1863. Type species: *Leptura unipunctata* Fabricius (Fairmaire designation, 1864).

78. *Vesperoctenus* Bates, 1891. Type species: *Vesperoctenus flohri* Bates (monobasic).
79. *Xestoleptura* Casey, 1913. Type species: *Xestoleptura corusca* Casey (by original designation).
80. *Xylosteus* Frivaldszky, 1838. Type species: *Xylosteus spinolae* Frivaldszky (monobasic).

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